## **Amendments to Claims:**

This listing of claims will replace all prior versions and listings of the claims in the application:

## **Listing of Claims:**

- 1. (Previously Presented) An isolated polypeptide comprising a sequence selected from one of:
  - (a) SEQ ID NOS:1-23; or
  - (b) SEQ ID NOS:26-31.
  - 2. (Cancelled).
- 3. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:1 or SEQ ID NO:9.
- 4. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:2 or SEQ ID NO:10.
- 5. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:3 or SEQ ID NO:7.
- 6. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:8.
- 7. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:4 or SEQ ID NO:13.
- 8. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:5 or SEQ ID NO:17.

- 9. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:6 or SEQ ID NO:18.
- 10. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:12 or SEQ ID NO:21.
- 11. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:11 or SEQ ID NO:15.
- 12. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:14 or SEQ ID NO:16.
- 13. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:19 or SEQ ID NO:20.
- 14. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:22 or SEQ ID NO:23.
- 15. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:26 or SEQ ID NO:27.
- 16. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:28 or SEQ ID NO:29.
- 17. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:30 or SEQ ID NO:31.
- 18. (Previously Presented) The isolated polypeptide of claim 1 wherein the polypeptide comprises part of a carrier protein.
- 19. (Previously Presented) The isolated polypeptide of claim 1 further comprising an accessory molecule.

- 20. (Previously Presented) The isolated polypeptide of claim 19 wherein the accessory molecule is a tag molecule, chemotherapeutic agent, radiopharmaceutical, cytotoxic agent, treatment molecule, antigenic molecule, antibody fragment or antibody.
- 21. (Previously Presented) The isolated polypeptide of claim 1 wherein the polypeptide consists essentially of a sequence selected from (A)or (B).
  - 22 32. (Cancelled).
- 33. (Previously Presented) A kit comprising one or more polypeptides comprising a sequence selected from one of:
  - (a) SEQ ID NOS:1-23; or
  - (b) SEQ ID NOS:26-31.
  - 34 54. (Cancelled).
- 55. (New) An isolated polypeptide comprising a sequence selected from one of:
  - (a) SEQ ID NOS: 1-23 having one conservative amino acid substitution; and
  - (b) SEQ ID NOS: 26-31 having one conservative amino acid substitution.
- 56. (New) The isolated polypeptide of claim 55 wherein the conservative amino acid substitution substitutes one hydrophobic residue for another hydrophobic residue.
- 57. (New) The isolated polypeptide of claim 56 wherein the hydrophobic residues are independently selected from the group consisting of isoleucine, valine, leucine and methionine.
- 58. (New) The isolated polypeptide of claim 56 wherein the hydrophobic residues are independently selected from the group consisting of phenylalanine or tryptophan.

- 59. (New) The isolated polypeptide of claim 55 wherein the conservative amino acid substitution substitutes one polar residue for another.
- 60. (New) The isolated polypeptide of claim 59 wherein the polar residues are independently selected from the group consisting of arginine and lysine.
- 61. (New) The isolated polypeptide of claim 59 wherein the polar residues are independently selected from the group consisting of glutamic and aspartic acids.
- 62. (New) The isolated polypeptide of claim 59 wherein the polar residues are independently selected from the group consisting of glutamine and asparagine.
- 63. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS: 1, 2, 3, 15, 16 and 22 having one conservative amino acid substitution, wherein the polypeptide binds to chronic myeloid leukemia or acute myeloid leukemia cells, but not to normal bone marrow cells, CD34+ cells or blood cells.
- 64. (New) The isolated polypeptide of claim 55 comprising SEQ ID NO. 3 having one conservative amino acid substitution, wherein the polypeptide binds to chronic myeloid leukemia cells, acute myeloid leukemia cells, and blood cells.
- 65. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS. 1 and 22 having one conservative amino acid substitution, wherein the polypeptide binds to chronic myeloid leukemia and acute myeloid leukemia cells, but not to cord blood cells.
- 66. (New) The isolated polypeptide of claim 55 comprising SEQ ID NO. 22 having one conservative amino acid substitution, wherein the polypeptide binds to chronic myeloid leukemia cells, acute myeloid leukemia cells, and cord blood cells.
- 67. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS: 1 and 22 having one conservative amino acid substitution,

wherein the polypeptide binds to chronic myeloid leukemia or acute myeloid leukemia cells, but not to cord blood cells.

- 68. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS. 1 and 4 having one conservative amino acid substitution, wherein the polypeptide binds to chronic lymphocytic leukemia cells, but not to normal peripheral blood cells.
- 69. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS: 1-6, 15, 19, 21 and 22 having one conservative amino acid substitution, wherein the polypeptide binds to malignant and nonmalignant myeloid cells.
- 70. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS: 1-3, 5, 6, 19, 21, and 22 having one conservative amino acid substitution, wherein the polypeptide binds to chronic lymphocytic leukemia cells and normal peripheral blood cells.
- 71. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS: 1-4, 15, 19, and 22 having one conservative amino acid substitution, wherein the polypeptide binds to chronic myeloid leukemia and acute myeloid leukemia cells, but not to chronic lymphocytic leukemia cells.
- 72. (New) The isolated polypeptide of claim 55 comprising a sequence selected from one of SEQ ID NOS: 1-6, 19, 21 and 22 having one conservative amino acid substitution, wherein the polypeptide binds to chronic myeloid leukemia cells, acute myeloid leukemia cells, and chronic lymphocytic leukemia cells.
- 73. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:1 or SEQ ID NO:9 having one conservative amino acid substitution.

- 74. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:2 or SEQ ID NO:10 having one conservative amino acid substitution.
- 75. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:3 or SEQ ID NO:7 having one conservative amino acid substitution.
- 76. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:8 having one conservative amino acid substitution.
- 77. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:4 or SEQ ID NO:13 having one conservative amino acid substitution.
- 78. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:5 or SEQ ID NO:17 having one conservative amino acid substitution.
- 79. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:6 or SEQ ID NO:18 having one conservative amino acid substitution.
- 80. (New) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:12 or SEQ ID NO:21 having one conservative amino acid substitution.
- 81. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:11 or SEQ ID NO:15 having one conservative amino acid substitution.
- 82. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:14 or SEQ ID NO:16 having one conservative amino acid substitution.

- 83. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO: 22 or SEQ ID NO: 23 having one conservative amino acid substitution.
- 84. (New) The isolated polypeptide of claim 55 wherein the sequence is selected from one of SEQ ID NOS: 26-31 having one conservative amino acid substitution.